

CLAIMS

What is claimed is:

1. A therapeutic combination comprising an amount of a  
5 COX-2 inhibitor compound source and an amount of a  
sex steroid compound wherein the amount of a COX-2  
inhibitor compound source and the amount of the sex  
steroid compound together comprises a dysmenorrhea-  
effective amount of the compounds.
- 10 2. The combination of Claim 1 wherein the COX-2  
inhibitor source is a COX-2 inhibitor.
3. The combination of Claim 2 wherein the COX-2  
15 inhibitor is a tricyclic COX-2 inhibitor.
4. The combination of Claim 3 wherein the tricyclic  
COX-2 inhibitor is selected from the group  
consisting of a pyrazole COX-2 inhibitor, a  
20 furanone COX-2 inhibitor, an isoxazole COX-2  
inhibitor, a pyridine COX-2 inhibitor, and a  
pyridazinone COX-2 inhibitor.
5. The combination of Claim 4 wherein the tricyclic  
25 COX-2 inhibitor is a pyrazole COX-2 inhibitor.
6. The combination of Claim 5 wherein the tricyclic  
COX-2 inhibitor is celecoxib.
- 30 7. The combination of Claim 5 wherein the tricyclic  
COX-2 inhibitor is deracoxib.
8. The combination of Claim 4 wherein the tricyclic  
COX-2 inhibitor is a furanone COX-2 inhibitor.

9. The combination of Claim 8 wherein the tricyclic COX-2 inhibitor is rofecoxib.
10. The combination of Claim 4 wherein the tricyclic  
5 COX-2 inhibitor is an isoxazole COX-2 inhibitor.
11. The combination of Claim 10 wherein the tricyclic COX-2 inhibitor is valdecoxib.
- 10 12. The combination of Claim 4 wherein the tricyclic COX-2 inhibitor is a pyridine COX-2 inhibitor.
13. The combination of Claim 12 wherein the tricyclic COX-2 inhibitor is 5-chloro-6'-methyl-3-[4-  
15 (methylsulfonyl)phenyl]-2,3'-bipyridine.
14. The combination of Claim 4 wherein the tricyclic COX-2 inhibitor is a pyridazinone COX-2 inhibitor.
- 20 15. The combination of Claim 14 wherein the pyridazinone COX-2 inhibitor is 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone.
- 25 16. The combination of Claim 2 wherein the COX-2 inhibitor is a benzopyran COX-2 inhibitor.
17. The combination of Claim 2 wherein the COX-2 inhibitor is a methane sulfonanilide COX-2  
30 inhibitor.
18. The combination of Claim 17 wherein the methane sulfonanilide COX-2 inhibitor is N-(4-nitro-2-cyclohexyloxyphenyl)methanesulfonamide.
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28. The combination of Claim 26 wherein the progestin sex steroid is norethindrone acetate.
29. The combination of Claim 26 wherein the progestin sex steroid is norgestimate.
30. The combination of Claim 26 wherein the progestin sex steroid is ethynodiol acetate.
31. The combination of Claim 26 wherein the progestin sex steroid is desogestrel.
32. The combination of Claim 26 wherein the progestin sex steroid is norgestrel.
33. The combination of Claim 26 wherein the progestin sex steroid is norethindrone.
34. The combination of Claim 1 wherein the COX-2 inhibitor compound source and the sex steroid compound are present in a single composition.
35. A combination therapy method for the treatment or prophylaxis of dysmenorrhea in a patient in need thereof, comprising:  
administering to the patient an amount of a COX-2 inhibitor compound source and administering to the patient an amount of a sex steroid compound wherein the amount of the COX-2 inhibitor compound source and the amount of the sex steroid compound together comprise a dysmenorrhea-effective amount of the compounds
36. The combination therapy method of Claim 35 wherein the COX-2 inhibitor source is a COX-2 inhibitor.

37. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is celecoxib.
- 5 38. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is rofecoxib.
39. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is valdecoxib.
- 10 40. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is deracoxib.
41. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is 5-chloro-6'-methyl-3-[4-(methylsulfonyl)phenyl]-2,3'-bipyridine.
- 15 42. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is N-(4-nitro-2-phenoxyphenyl)methanesulfonamide.
- 20 43. The combination therapy method of Claim 36 wherein the COX-2 inhibitor compound is 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone.
- 25 44. The combination therapy method of Claim 35 wherein the COX-2 inhibitor source is a prodrug of a COX-2 inhibitor.
- 30 45. The combination therapy method of Claim 44 wherein the prodrug of the COX-2 inhibitor is parecoxib.
- 35 46. The combination therapy method of Claim 35 wherein the sex steroid compound comprises an amount of an

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estrogen sex steroid and an amount of a progestin sex steroid wherein the amount of the estrogen sex steroid and the amount of the progestin sex steroid together comprise a menstrual cycle controlling-effective amount of the compounds.

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47. The combination therapy method of Claim 46 wherein the estrogen sex steroid is ethinyl estradiol.
- 10 48. The combination therapy method of Claim 46 wherein the progestin sex steroid is selected from the group consisting of levonorgestrel, norethindrone acetate, norgestimate, ethynodiol acetate, desogestrel, norgestrel and norethindrone.
- 15 49. The combination therapy method of Claim 48 wherein the progestin sex steroid is levonorgestrel.
- 20 50. The combination therapy method of Claim 48 wherein the progestin sex steroid is norethindrone acetate.
51. The combination therapy method of Claim 48 wherein the progestin sex steroid is norgestimate.
- 25 52. The combination therapy method of Claim 48 wherein the progestin sex steroid is ethynodiol acetate.
53. The combination therapy method of Claim 48 wherein the progestin sex steroid is desogestrel.
- 30 54. The combination therapy method of Claim 48 wherein the progestin sex steroid is norgestrel.
- 35 55. The combination therapy method of Claim 48 wherein the progestin sex steroid is norethindrone.

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